Abstract

The invention relates to a phase shifted binary transmission encoder with data input and data output, where the phase shifted binary transmission encoder includes an exclusive or gate having two inputs and one output, the output of the exclusive or gate being the output of the Phase shifted binary transmission encoder, where one input of the exclusive or gate is connected with the output via a first delaying element and the other input of the exclusive or gate is connected with the data input via a second delay element, both delaying elements being connected with a clock input, wherein the delay elements are transparent D flip-flops. Furthermore the invention relates to a phase modulator and an optical network element for phase shaped binary transmission.